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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/925,163	08/08/2001	Michael J. Kirkwood	50325-0532 (3861)	4082
29989	7590	09/08/2004	EXAMINER	
HICKMAN PALERMO TRUONG & BECKER, LLP			BURGE, LONDRA C	
1600 WILLOW STREET			ART UNIT	
SAN JOSE, CA 95125			PAPER NUMBER	
			2178	

DATE MAILED: 09/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/925,163	<b>Applicant(s)</b> KIRKWOOD ET AL.	
	<b>Examiner</b> Londra C Burge	<b>Art Unit</b> 2178	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 08 August 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) •                      | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>2/19/2002</u> •   | 6) <input type="checkbox"/> Other: _____                                    |

### DETAILED ACTION

1. This action is responsive to communications: Original application files 8/8/2001 and IDS filed 2/19/2002.
2. Claims 1-10 are pending. Claims 1, 8, 9 and 10 are independent claims.

### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ferrel et al. (herein after Ferrel) U.S. Patent No 5,907,837 filed 11/17/1995 in view of Beattie et al. (herein after Beattie) U.S. Patent No. 6,256,627 B1 filed 6/23/1998.

In regard to independent claim 1, Ferrel discloses *receiving a request to generate an electronic document containing information responsive to a user query based on one or more information objects that are organized in one or more hierarchical trees, wherein the query contains a concept and an information type* (Ferrel Abstract i.e. information and document requests and search and Figure 8 and Col 24 Lines 12-40 i.e. information arranged in a hierarchal tree); *searching a cache of information objects* (Ferrel Col 28 Lines 30-35 i.e. results in a query cache); *automatically creating the electronic document using the matching information objects and delivering the electronic document in response to the user query.* (Ferrel Col 28 Lines 30-43 i.e. matching content objects and query results)

Ferrel does not specifically mention *to identify one or more rows that match the query concept and the query information type; determining an intersection of the rows, yielding a result set of rows; retrieving matching information objects based on following index pointers in the rows of the result set*. However, Beattie mentions a query log organized into rows and each row stores a query and its associated search results (Beattie Col 11 Lines 49-56). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply Beattie to Ferrel, providing Beattie the benefit of having the results in rows for better organization on the information and results for the user.

**In regard to dependent claim 2,** Ferrel discloses *searching a result cache for a result row that is associated with a matching concept and matching information type; if searching the result cache yields no cache hits, searching a content cache of information objects*. (Ferrel Col 28 Lines 30-43 and Col 28 Lines 59-67 and Col 29 Lines 1-7 i.e. cache results and not in the query cache)

Ferrel does not specifically mention *a first set of interim result rows having a matching associated concept and a second set of interim result rows having a matching associated information type*. However, Beattie mentions a query log organized into rows and each row stores a query and its associated search results (Beattie Col 11 Lines 49-56). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply Beattie to Ferrel, providing Beattie the benefit of having the results in rows for better organization on the information and results for the user.

**In regard to dependent claim 3,** Ferrel discloses *wherein the hierarchical trees comprise a concept tree and a technology tree, and wherein each tree is organized ... having one*

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*or more relation types, wherein each relation type has one or more relation instances, wherein each relation instance has one or more relation participants, and wherein each relation participant is associated with one or more information objects.* (Ferrel Abstract i.e. information and document requests and search and Figure 8 and Col 24 Lines 12-40 i.e. information arranged in a hierarchal tree) (Ferrel Col 44 Lines 44-67 and 45 Lines 1-62 i.e. system and Col 28 Lines 30-43 and Col 28 Lines 59-67 and Col 29 Lines 1-7, Col 11 Lines 29-37 and Col 30 Lines 41-63)

Ferrel does not specifically mention *wherein each tree is organized as a vocabulary node*. However, Beattie mentions a vocabulary of the subject matter searched (Beattie Col 1 Lines 60-63 and Col 2 Lines 23-27). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply Beattie to Ferrel, providing Beattie the benefit of having a vocabulary to match the content search, which would make the document search quicker for the user.

**In regard to dependent claim 4,** Ferrel discloses *further comprising the step of caching the result cache*. (Ferrel Col 28 Lines 30-43 and Col 28 Lines 59-67 and Col 29 Lines 1-7 i.e. cache results)

Ferrel does not specifically *set of rows in the result*. However, Beattie mentions a query log organized into rows and each row stores a query and its associated search results (Beattie Col 11 Lines 49-56). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply Beattie to Ferrel, providing Beattie the benefit of having the results in rows for better organization on the information and results for the user.

**In regard to dependent claim 5,** Ferrel discloses *further comprising the step of providing the information objects to a delivery engine that generates the electronic document*

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*based on the information objects and delivers the electronic document in response to the user query. (Ferrel Abstract and Col 28 Lines 30-43)*

**In regard to dependent claim 6,** Ferrel discloses *receiving the user query at a distributed cache manager; selecting one of a plurality of information object cache servers to process the user query and generate the electronic document; forwarding the user query to the selected one of the plurality of information object cache servers. (Ferrel Col 28 Lines 30-43 and Col 28 Lines 59-67 and Col 29 Lines 1-7)*

**In regard to dependent claim 7,** Ferrel discloses *receiving the user query from a delivery engine at a distributed cache manager; selecting one of a plurality of information object cache servers to process the user query and generate the electronic document; forwarding the user query to the selected one of the plurality of information object cache servers; providing the information objects to a delivery engine that generates the electronic document based on the information objects and delivers the electronic document in response to the user query. (Ferrel Col 28 Lines 30-43 and Col 28 Lines 59-67 and Col 29 Lines 1-7) (Ferrel Abstract and Col 28 Lines 30-43)*

**In regard to independent claims 8 and 9,** claims 8 and 9 in addition to the following reflect similar subject matter claimed in claim 1 and is rejected along the same rationale. (Ferrel Col 44 Lines 44-67 and 45 Lines 1-62 i.e. system)

**In regard to independent claim 10,** Ferrel discloses *a computer-readable medium for storing a plurality of information chunks in a content cache, each chunk of the plurality of information chunks retrieved by a directory address; and a plurality of data structures describing atomic concepts and a plurality of data structures describing relationships among the*

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*atomic concepts in a concept cache (Ferrel Col 44 Lines 44-67 and 45 Lines 1-62 i.e. system and Col 28 Lines 30-43 and Col 28 Lines 59-67 and Col 29 Lines 1-7, Col 11 Lines 29-37 and Col 30 Lines 41-63); and one or more processors configured as an interface for managing the plurality of information chunks in the content cache, managing the plurality of data structures in the concept cache, and arranging content on the Web page based at least in part on data in the concept cache (Ferrel Col 44 Lines 44-67 and 45 Lines 1-62 i.e. system and Col 28 Lines 30-43 and Col 28 Lines 59-67 and Col 29 Lines 1-7, Col 11 Lines 29-37 and Col 30 Lines 41-63 and Col 2 Lines 65-67 and Col 3 Lines 1-5); one or more sequences of instructions in the computer-readable medium, which instructions, when executed by the one or more processors, cause the one or more processors to carry out the steps of: receiving a request to generate an electronic document containing information responsive to a user query based on one or more information objects that are organized in one or more hierarchical trees, wherein the query contains a concept and an information type (Ferrel Abstract i.e. information and document requests and search and Figure 8 and Col 24 Lines 12-40 i.e. information arranged in a hierarchal tree); searching a cache of information objects (Ferrel Col 28 Lines 30-35 i.e. results in a query cache); automatically creating the electronic document using the matching information objects and delivering the electronic document in response to the user query. (Ferrel Abstract i.e. information and document requests and search and Figure 8 and Col 24 Lines 12-40 i.e. information arranged in a hierarchal tree)*

Ferrel does not specifically mention *determining an intersection of the rows, yielding a result set of rows; retrieving matching information objects based on following index pointers in the rows of the result set and to identify one or more rows that match the query concept and the*



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*query information type*. However, Beattie mentions a query log organized into rows and each row stores a query and its associated search results (Beattie Col 11 Lines 49-56). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply Beattie to Ferrel, providing Beattie the benefit of having the results in rows for better organization on the information and results for the user.

Ferrel does not specifically mention *among names in an enterprise-specific vocabulary*. However, Beattie mentions a vocabulary of the subject matter searched (Beattie Col 1 Lines 60-63 and Col 2 Lines 23-27). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply Beattie to Ferrel, providing Beattie the benefit of having a vocabulary to match the content search, which would make the document search quicker for the user.

### ***Conclusion***

**5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.**

Deran	U.S. Patent No. 5,283,894	issued	2/1/1994
Krellenstein	U.S. Patent No. 5,924,090	issued	7/13/1999

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Londra C Burge whose telephone number is (571) 272-4122.

The examiner can normally be reached on 8:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Hong can be reached on (571) 272-4124. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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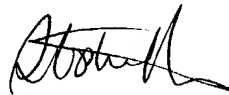
(703) 746-7240 (for informal or draft communications, please label  
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**Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,  
Arlington, VA, Fourth Floor (Receptionist).**

Londra C Burge  
8/24/04

  
STEPHEN S. HONG  
PRIMARY EXAMINER